

W
26
g W216

A CLASSIFIED LIST

OF

FIRST CLASS

Microscopic Objects,

WITH MANY

New, Rare and Interesting Specimens,

AFFORDING INSTRUCTIVE ILLUSTRATIONS IN

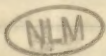
ANATOMY, PHYSIOLOGY, BOTANY, ENTOMOLOGY,
GEOLOGY AND MINERALOGY.

PREPARED AND SOLD BY

WM. H. WALMSLEY.

TO THESE ARE ADDED

A Choice Selection of the best and finest Materials and Implements used
in Mounting Objects, together with the best Works on the practical
use of the Microscope, and Lists of Microscopes and Lenses
made by Zentmeyer, Tolles and Wales.



WM. H. WALMSLEY,

PHILADELPHIA.

INDEX.

Introductory Remarks and Explanations, Prices of Objects, List	PAGE.
of Books, References, &c.,	3 & 4
Materials and Instruments used in Preparing and Mounting Objects,	5
Vegetable Preparations,	6 7 & 8
Animal Preparations, Injections, &c.,	9
Insect Preparations, whole,	10
“ “ parts,	10 & 11
Micro-Photographs,	11
Diatomacea, Recent & Fossil, and Guano,	12
Polarizing Objects,	13
Objects for the Lantern and Oxyhydrogen Microscope,	14
Miscellaneous Objects, &c.,	15
List of Microscopes, Apparatus, &c.,	15
Samples of Labels,	15

TERMS.

The Prices are all Net, for Cash, either Pre-paid or on Delivery of the goods, and not subject to any reduction or discount.

Remittance can be made by Post Office Order or Draft, or payment may be made to the Express Company. Do not send money by letter.

The Postage on Objects does not exceed Twenty-five Cents per dozen.

No charge is made for Boxes for Transit of Objects, excepting air-tight cases, for hot climates.

The conditions on which specimens are sent for inspection and approval, will be found on page 4.

Cheap or low-priced Microscopes and Objects will be furnished if desired, as good as can be had elsewhere, but are *not* warranted.

CATALOGUE

OF

MICROSCOPIC OBJECTS.

INTRODUCTORY REMARKS AND EXPLANATIONS.

Although this Catalogue is intended as a guide in the selection and purchase of objects, yet it is obvious that no such list can be strictly correct for any considerable time, since New Objects are being added continually and the vacancies that occur cannot always be filled instantly. It must therefore be understood that these objects can be supplied on demand with *probability* rather than *certainty*; hence, it is advisable when ordering to name a few more than the number actually required. In this Catalogue about 1,000 objects are comprised; of these it may be calculated that more than one-half will be found in stock. Any object not specially named will be procured, *if possible*, when ordered, and orders are solicited for any object desired, even if not named in the Catalogue, as it is the aim to keep and supply the fullest assortment of Microscopic Objects to be found in this country. The Alphabetical arrangement has been preserved throughout as the easiest guide to any particular specimen.

About three-fourths of the Objects named are sold at Seventy-five Cents each, and are *generally* indicated by a green and gilt label. All these are of the best quality. There are a few *specialties* at a higher price, either from the specimen being scarce, unavoidably expensive, or difficult to prepare.

With a few exceptions the Objects at Seventy-five Cents each, include some sections of Bones and Teeth, and other Animal Substances, portions of Insects, with some whole ones, many Vegetable Structures, Opaque Objects, Polariscope Specimens, Recent and Fossil Diatomacea, Spicula Foraminifera, Polycistina, and Micro-Photographs.

Those at Fifty Cents each, include Hairs, Feathers, Scales, and similar Substances, Sections of Wood and Stems, and all Dry Objects.

Fine Anatomical Injected Specimens are generally One Dollar each.

The Prices marked on the top of each page have a *general* signification only to the Objects on that page, and refer to the majority that follow. Some of the exceptions are marked; but the prices of many are liable to fluctuation from scarcity or abundance, although it is the intention to adhere closely as possible to the *general* list of prices herein named.

In the preparation of these Specimens, the aim has not been so much to *reduce the price* as it has to *improve the quality*, by supplying every Object as clean and perfect as its nature will admit. The predominant wish has not

been to introduce as many Objects as possible in each department, but rather to rest satisfied with such as are the most beautiful as Natural Objects, or of their kind the best illustration of special structure or function, and hence, of the highest interest both to the student in science, and the popular observer also.

Any person confidentially known or giving reference to those who are, if he desires to purchase a reasonable number of Objects, can have an assortment sent for examination and approval, the express charge both ways, being at his expense, the Objects to be returned *within one week*, and the risk of damage or loss in transit borne by the purchaser. Such specimens are sent securely packed in Rack Boxes, affording facilities for inspection, as well as for packing and returning those not chosen.

In this Catalogue will be found many Objects admirably suited to educational and instructional use for the elucidation of general principles, as well as of special application and adaptation. In Entomology, the various parts of Insects; in Botany, the Elementary Tissues of Plants; in Anatomy and Physiology, the organic structure in Man and the lower animals; the Microscope thereby offers to the Parent and Tutor a pleasing aid to the communication of useful and truthful knowledge. It would be a laborious task to specify those objects that have especial interest either from their Novelty, Beauty or Scarcity; but there are many that may repay a careful notice among the Whole Insects, the Transparent Injections and Polariscope Objects, and the Miscellaneous Vegetable Preparations.

REFERENCES:

Dr. J. H. McQuillen, Editor Dental Cosmos, Philadelphia.

Any Member of Microscopical Department of Academy of Natural Sciences, Philadelphia.

New York Microscopical Society, New York.

The State Microscopical Society, of Illinois, Chicago.

Prof. O. W. Holmes, Boston.

Mr. Charles Stodder, “

Mr. Robert B. Tolles, “

BOOKS ON THE MICROSCOPE.

BEALE.....	“How to work with the Microscope,”.....	\$10 00
CARPENTER.....	“The Microscope and its Revelations,”.....	6 25
CLARKE.....	“Objects for the Microscope,”.....	1 75
COOKE.....	“1,000 Objects for the Microscope,”.....	50
“	“Rust, Smut and Mildew,”.....	3 00
DAVIES.....	“On Preparing and Mounting Objects,”.....	1 50
GRIFFITH & HENFREY	“The Micrographic Dictionary,”.....	21 00
HOGG.....	“On the Microscope.....”.....	3 75
WOOD, Rev.....	“Common Objects for the Microscope,”.....	50
WALMSLEY.....	Catalogue of Objects and Apparatus,.....	GRATIS.

Materials, &c., for Preparing and Mounting Objects.

Turn Table for making cement cells and finishing slides.....	\$4 50
Machine for cutting wood and other sections.....	10 00
Chisel " " "	1 50
Spring Compress for thin glass covers.....	05
Wooden Forceps " " " per doz.....	25
Glass Slips, Unground Edge. 3 x 1 inch. per doz.....	25
" Ground " 3 x 1 inch. " "	50
" Excavated Cells 3 x 1 " " "	3 00
" Glass Ring 3 x 1 " " "	3 00
Thin Glass Covers, Squares or Circles. " "	40
" " " per oz. \$3.50. Extra Thin. per oz.....	4 50
Lead Ring Cells, per doz.....	50
Adhesive Gilt Labels for fronts, as sample page, per hundred.....	50
" " " backs " " "	50
Superfine White Name Labels, round, 10 cts., Oval 20 cts. per hundred...	1 00
Round Punches for punching labels,.....from 75 cts to	18 00
Air Pump for Mounting.....	50 cts. to 5 50
Pocket Magnifiers for Insects, Plants and Diatoms.....	6 50
Valentine's Knife for thin sections.....	10 00
Set of small Dissecting Instruments.....	10 00
Field's Dissecting Microscope.....	10 00
Forceps, Knives, Scissors, Needles, Test Tubes, Watch Glasses, Glass Tubes, &c., &c.	
Collecting Bottles, each.....	10
Microscopic Lamp, for oil, best in use.....	8 00
" " gas " "	10 00
Finest Canada Balsam, Pure, per Bottle.....	25
" " prepared for use without heat, per bottle.....	50
Pure Glycerine, Medium, per bottle.....	50
" Jelly, per bottle.....	50
Universal Preservative Fluid for Animal Tissues, per bottle.....	50
" " Vegetable " " "	50
Brunswick Black, per bottle.....	25
Best Black Asphaltic Varnish, for Finishing, per bottle.....	50
" Shellac Cement for making cells, per bottle.....	50
" White Zinc Cement " " "	50
" Gold Size, per bottle.....	25
Marine Glue, per box.....	20
Dropping Bottles, each.....	25

Boxes, Cases and Cabinets for Objects.

For 1 or 3 Objects; for Mailing, each.....					10
" 6	"	"	"	"	12
" 10	"	"	"	"	15
" 25	"	"	"	"	25

Neat Cloth Covered Boxes, with Walnut Racks.

For 25 Objects, each.....	50 cts to	75
“ 72 “ Black Walnut Case.. ..		3 50
“ 200 “ “ “ Cabinet, objects lie flat, very compact....		4 00

BLACK WALNUT CABINETS.

with Drawers, English Pattern.

For 500 Objects.....	30 00
“ 1,000 “.....	40 00

VEGETABLE PREPARATIONS.

Sections of Wood.

50 cts each.

Ash.
 Althea.
 Apple.
 Alanthus.
 Azalia.
 Arbutulan.
 Beech.
 Buck Thorn.
 Blackberry.
 Box Wood.
 Birch.
 Bamboo.
 Cedar.
 Chestnut.
 Cherry.
 Cypress.
 Catalpa.
 Dog Wood.
 Elder.
 Elm.
 Fuschia.
 Gooseberry.
 Honeysuckle.
 Hickory.
 Holly.
 Horse Chestnut.
 Hemlock.
 Ivy.
 Locust.
 Laurel.
 Lilac.
 Linden.
 Mahogany.
 Maple.
 Osage Orange.
 Oak.
 Peach.
 Pear.
 Palm.
 Plum.
 Poplar.
 Pine.
 Quince.
 Rosewood.
 Spruce.
 Sycamore.
 Sassafras.
 Syringa.
 Vine.
 Willow.
 Yew.

Sections of Fossil Wood.

From various localities.

75c. to \$1 00.

Sections of Stems.

50 cts. each.

Asparagus.
 Bull Rush.
 Burdock.
 Castor Oil Plant.
 Clematis.
 Cycas Revoluta. 75 cts.
 Elder Pith.
 Passion Flower.
 Pontederia Cordata.
 Straw, Wheat. 75 cts.
 " Rye. "
 " Oats. "
 Sun Flower.
 Symplocarpus faetidus.
 Sugar Cane.
 Yellow Water Lily.

Cuticles of Petals.

50 cts.

From Geranium and Peony.
 " Pansy and Poppy.
 " Nasturtium and Verbena.

Spiral Vessels.

75 cts.

From Asparagus.
 " Collomia Seed.
 " Rhubarb Stalk.
 " Banana.
 " Lotus.
 " Lily.

Stomata in Cuticles.

75 cts.

From Box.
 " Oleander.
 " India Rubber Tree.
 " Marchantia.

Pollens.

75 cts.

From Cedar.
 " Geranium.
 " Hollyhock.
 " Lily.
 " Lobelia.
 " Mallow.
 " Pine Tree.
 " Passion Flower.
 " Poppy.
 " Sun Flower.

Sections of Leaf.

Of Oleander.

" India Rubber Tree.

VEGETABLE PREPARATIONS.

75 cts. each.

Starches.

From Arrow Root.

- " Indian Corn.
- " Ginger.
- " Potato.
- " Rice.
- " Sago.
- " Tapioca.
- " Tous les Mois.
- " Wheat.

Raphides.

From Cactus.

- " Garlic.
- " Hyacinth.
- " Houstonia.
- " Onion.
- " Pear.
- " Rhubarb.
- " Squill.
- " Water Lily.
- " Vine.

Sections of Hard Tissues.

From Vegetable Ivory.

- " Cone of Pine.
- " Shell of Cocoa Nut.
- " " Walnut.
- " Stone of Apricot.
- " " Cherry.
- " " Damson.
- " " Olive.
- " " Peach.
- " " Plum.

Sections of Roots.

Various.

Leaves with Fructification.

Polypodium Vulgare and many others.

Scales and Hairs.

From various Ferns.

Spores.

- Ecidium grossulariæ.
- Adiantum.
- Aspidium.
- Lycopodium.
- Pteris elegans.
- Polypodium vulgare.
- Scolopendrium.
- Uredo rubosa.
- Ustilago maidis.
- Platycerum alcecorne.

Miscellaneous.

Mosses—Bartramia.

- " Bryum.
- " Dicranum.
- " Funaria.
- " Hypnum.
- " Sphagnum.
- " Weissia.
- " Various whole plants, showing rootlets, leaves, stems and fruit very beautiful and instructive specimens.....75 cts. and \$1 00

Mosses—Capsules only.

- " Leaves and Rootlets.

Flower of Houstonia Cærulea.

Showing all organs of Fructification
spiral vessels, Papillæ and
Raphides.....\$1 00

Box Leaf.

Dissected, showing both sides Stomata
and Reticulation.....\$1 00

Lower side Stomata.

Upper side Reticulation.

Seeds.

Of Amaranthus.

- " Anagallis.
- " Antirrhinum.
- " Caraway.
- " Carrot.
- " Campanula.
- " Catchfly.
- " Collomia grandiflora.
- " Coreopsis.
- " Chickweed.
- " Cypress Vine.
- " Ecermocarpos.
- " Fox Glove.
- " Lophospermum Scandens.
- " Mignonette.
- " Petunia.
- " Portulacca.
- " Pinks.
- " Poppy.
- " Paulownia imperialis.
- " Scarlet Lychnis.
- " Scabiosa.
- " Sorrel.
- " Sphenogyne Speciosa.
- " Zinnia elegans.

VEGETABLE PREPARATIONS.

75 cts.

Typical Illustrations of the Cellular Composition of Plants.

Simple Cellular tissue.
Isolated Cells.
Stellariform Cells.
Fibro-cellular Tissue.
Scalariform Vessels.
Spiral Vessels.
Pitted ducts or glands.
Annual concentric layers.

Fungi, Mould, Mildew, &c.

From Potato.
" Wheat.
" Barley.
" Indian Corn.
" Rotten Wood.
" Fruit preserves.
Cluster cups.
Bristle cups.
Nettle Flasks.

Confervacea, Algæ and Desmidiacea.

Batrachospermum moniliforme.
Draparnaldia plumosum.
Spirogyra uberi.
" quinina.

Nostoc.
Sirostephon.
Chaetophora pisiformis.
Tetrasporas.
Zygnema.
Closterium.
Cosmarium.
Pediastrum.
Volvox globator. \$1 00
Wolffia columbiana. 1 00

Marine Algæ.

Ceramium, various.
Dasya, "
Ectocarpus, "
Polysiphonia, various.
Ptilota Plumosa.

Typical Illustrations of the Growth and Structure of Plants.

These are arranged in sets, twelve slides to each, put up in neat boxes, and are invaluable educational aids. Per set.....\$9 00

For Polariscopes.

Starches.

From Arrow Root.
" Canna.
" Ginger.
" Potato.
" Sago.
Section of Potato, Starch in cells.

Cuticles.

From Aloe.
" Leaf of Eleagnus.
" " Deutzia Scabra.
" " Deutzia gracilis.
" Bamboo.
" Equisetum.
" Indian Corn.
" Oleander.
" Husk of Rice grain.
" Straw of "
" " Wheat.

Miscellaneous.

Scalariform vessels from Fern.
Seed of Eecremocarpus.
Flower of Houstonia Cærulea. \$1 00
Long Sections of Wood.
Fibres of Flax.
" " Cotton.
" " Milk Weed.
Leaf of Drosera Rotundifolia,
showing glandular Hairs. \$1 00
Hairs from Mullein.
" " Ferns, various.
" " Paper Mulberry Tree.
" " Eleagnus.
" " Rose.
Section Stem of Yellow Water Lily.
" " Fan Palm.
" Stone of Cherry.
" " Olive.
" " Plum.
" of Rice Paper.

Papyrus.
Glands of Sweet Brier.
Gun Cotton.
Fibres of Palm.
Silk.
Asparagine.
Salicine.

ANIMAL PREPARATIONS.

\$1 00

Injected Preparations.

Human—Lung, Adult.
 “ “ Foetal.
 “ “ Tubercle.
 “ Stomach.
 “ “ sections.
 “ Small Intestine.
 “ Large Intestine.
 “ Peyer's Gland.
 “ Placenta.
 “ Muscle, voluntary.
 “ “ involuntary.
 “ “ sections.
 “ Kidney, Adult.
 “ “ Foetal.
 “ “ Tubuli.
 “ “ Brights.
 “ Mesentery.
 “ Trachea.
 “ Tongue.
 “ “ sections.
 “ Liver.
 “ Bladder.
 “ Adipose Tissue.
 “ Skin, Surface.
 “ “ Finger.
 “ “ “ section.
 “ “ Sole of Foot.
 “ “ “ “ sections.
 “ “ Heel.
 “ “ “ sections.
 Frog—Lung, inner surface.
 “ “ outer
 “ Tongue.
 “ Palate.
 “ Stomach.
 “ Intestine, small.
 “ “ large.
 “ Skin.
 “ Kidney.
 Sheep, various parts.
 Ox “ “
 Dog “ “
 Cat “ “
 Serpents' Intestines.
 Fowl “
 “ Lung.
 “ Stomach.
 Gills of Eel.
 Adipose Tissue Sheep.
 Pad of Cat's Foot.
 Cancer Cells.
 Mucus Membrane.
 Uterus of Sow.
 Suprarenal Capsule.
 Human Tendon, sections.
 “ Cartilage, “

THE FOLLOWING ARE NOT INJECTED.

Trichina Spiralis in human muscle.
 Section of a Quill of a Hedgehog
 Feather of a Humming Bird.
 “ Ibis.
 “ Love Bird. } 75
 “ Parrot.
 “ Penguin.
 “ Pigeon.

Typical.

Blood Discs, Human. }
 From Reptile. } 50
 “ Bird.
 “ Fish.
 Hair, Human. } various.
 “ Animals. } 50 cts.
 “ Bat.

Bones.

Sections Man.
 “ Animals, various.
 “ Birds “
 “ Fish “

Teeth.

Sections, Animals, various.
 “ Fossil “
 “ Man.

A set of 12 Urinary Deposits.

Oxalate of Lime.
 “ “ Dumb Bell
 Urea.
 Hippuric Acid.
 Lithic Acid.
 “ Dumb Bell.
 Urate of Soda.
 Cystic Oxide.
 Phosphates.
 Spermatozoa.
 Purpurate of Ammonia.
 Carbonate of Lime.
 In a box, per set,.....\$12 00
 Spermatozoa of Horse.
 “ “ Human.
 “ “ Elephant
 “ “ Bull.
 “ “ Rhinoceros.
 Head of Cysticercus from Hare, \$1.50
 Muscular Fibre of Mammal. }
 “ “ Bird. } 75
 “ “ Insect.
 “ “ Fish.
 Pigmentum Nigrum of Human Eye.

INSECT PREPARATIONS.

Whole Insects,

\$1 00 to \$1 50

Ants, various.
 Ant Lion.
 Aphides, various.
 Bed Bug.
 Blow Fly.
 Bot "
 Bees, various.
 Beetles, "
 Crane Fly.
 Coccinella or Lady Bird, various.
 Corixa Striata.
 Centipede.
 Dragon Fly.
 Drone "
 Dung "
 Fungus "
 Fleas, various.
 Frog Hopper
 Gnats, various.
 Glow Worm, sexes.
 Green Hopper.
 Gyrinus Natator.
 Garden Spider.
 Gad Fly.
 House Fly.
 " Spider.
 Harvest "
 Ichneumon Fly.
 Jumping Spider.
 Katydid, young.
 Larvæ, various.
 Mosquito.
 Mite.
 Measuring Worm.
 Mud Beetle.
 " Fly.
 Notonecta.
 Ophion.
 Parasites of Man.
 " " Dog
 " " Cat.
 " " Fowls.
 " " Birds.
 " " Beetles.
 " " Plants.
 Reduvius.
 Scorpions.
 Skaters.
 Spiders, various.
 Sugar Insect.
 Saw Fly, various

Miscellaneous.

Feathered Oar of Corixa.
 " " Dytiscus.
 " " Notonecta
 Expanding Paddle of Gyrinus.

Parts of Insects.

75 cts.

Antennæ of Cockroach.
 " " Flies, various.
 " " Moths, "
 " " Male Gnats.
 " " Female, "
 Eye, of Bees, various.
 " " Flies, "
 " " Dragon Fly, various.
 " " Skaters.
 " " Lobster.
 " Opaque. "
 Gizzard of Beetle.
 " " Cockroach.
 " " Cricket.
 " " Katydid, \$1 00
 Hairs of Caterpillars. 50
 Halteres of Flies, various.
 Head of Butterflies, various.
 " Crane Fly.
 " Larvæ of Dragon Fly.
 " " Gnat.
 " Mosquito, (Lancets.)
 " Spider, various.
 " Tipula.
 Leg and Foot of Flies, various.
 " " " " Bees, various.
 " " " " Frog Hopper.
 " " " " Gyrinus.
 " " " " Spiders, various.
 " " " " Wasp.
 " " " " Notonecta.
 " " " " Corixa.
 " " " " Dytiscus.
 Mouth and Jaws of Wasp.
 " " " " Beetles.
 Ovipositor of Flies, various.
 Probosces or Tongue.
 " of Bees, various.
 " " Beetles, "
 " " Flies, "
 " " Cricket, "
 " " Gnats. "
 " " Mosquito.
 " " Moths, various.
 " " Wasp.
 " " Saw Fly
 " " Frog Hopper.
 Scales from Wings of Moths, various.
 " " " " Butterflies, "
 " " " " Gnats. 50
 Spinneret of Silkworm.
 " " Spider.
 Spiracles of Flies, various.
 " " Caterpillar, various.
 " " Larvæ, "
 Sting of Bees, various.

Parts of Insects.

Trachea of Silkworm.
 " " Tomato Worm.
 Wings of Bee, with hooklets.
 " " Saw Fly, with hooklets.
 " " Wasp, " "
 " " Flies, various.
 " " Gnats, "
 " " Butterflies, various.
 " " Moths, "
 " " Katydid.

Elytron of Corixa.

" " Beetles, various.
 " " Coccinella, "

Test Scales of Podura.

" " " Lepisma Saccharina.
 " " " Cloth Moth.
 " " " Gnat's Wing.
 " " " Azure Blue.
 " " " Morpho Menelaus.
 " " " Pontia Brassica.

Pygidium of a Flea.

Opaque Insect Preparations.

Beetles, various.
 Weevils, "
 Eggs of Insects, various.
 Eyes " " "
 Heads of Flies, "
 " Beetles, "
 Wings of Moths, "
 " Butterflies, various.
 Elytra of Beetles, "
 Gizzard of Cricket, "
 Spiracles, various.
 Parasites, "

Opaque and Binocular Objects.

Hairs of Peccary.
 Spicules of Gorgonia.
 Feathers of Humming Bird.
 " Parrot.
 " Peacock.
 " various.
 Bones of Star Fish.
 Polycistina Barbados various. \$2 50
 Foraminifera, various. 1 50
 Decomposed Glass. 1 00
 Gold Dust. 1 00
 Ores of various metals.
 Bismuth.
 Leaf of Deutzia.
 " Nettle with Stings.
 Leaf of Platycerum with Stellate hairs
 Pollen of Geranium.
 " Hollyhock.
 " Lobelia.
 " Lily.
 " Passion flower.

Micro-Photographs.

Eminent Men, contains 115 Portraits
 Eminent Women, contains 105 Portraits.

The Kings and Queens of England, from the Conquest to Queen Victoria, contains 85 Portraits.

Saturday Night, contains 20 Portraits
 Sunday Morning, contains 28 Portraits
 The Origin of Music.

Bolton Abbey in the Olden Time.

The Stag at Bay.

Shoeing.

Laying Down the Law.

Not Caught Yet.

Salmon and Otter

Highland Shepherd's Home.

The Lady and Spaniels.

"Islay," Her Majesty's favorite
 Scotch Terrier, with the Macaw
 Love Birds and Spaniel Puppy.

The Shot.

May and December.

Oh!

The Orphans.

Her Majesty, in State Robes.

The Queen, Prince Consort, and Royal Family.

Thine is the Kingdom.

Cromwell and Milton.

Going with the Stream.

Going against the Stream.

The Stream of Life.

Sherry, Sir?

Did you Ring?

The Expected Penny.

Christ Blessing Little Children.

Introduction of Christianity into Britain.

Cupboard Love.

Women of the Bible.

The Gardener's Daughter.

The Halt.

Cymon and Iphigenia.

The Orphan's Dream.

The Fight for the Standard.

Nothing Venture Nothing Have.

See-Saw.

Moses with the Tables of the Law.

The Ten Commandments, 1230 letters

Houses of Parliament.

Trafalgar Square.

The Bath,—a Sanitary Measure.

The Bath,—a Sanitary Operation.

Declaration of Independence, 7850 letters. \$1 50

£ 1000 Note.

Shakspeare.

Empress Eugenie.

The Moon, telescopic.

DIATOMS, RECENT AND FOSSIL.

75 cts

Test Objects.

Pleurosigma hippocampus
“ strigilis.
“ attenuatum.
“ spenceri.
“ cuspidata.
“ sigmoidea.
“ angulatum.
“ quadratum.
“ lineatum.
“ elongatum.
“ strigosum.
“ anceps.
“ balticum.
“ formosum.
“ littorale.
“ fasciola.
“ macrum.
“ intermedium.
“ didyma.
“ serians.
“ Arimian Test.
Hyalodiscus subtilis.
Grammatophora subtilissima.
“ marina.

Diatomaceæ, Recent and Fossil.

Campylodiscus clypeus.
“ costatis.
“ spiralis.
Actinocyclus undulatus.
Surirella constricta.
“ tenera.
Gomphonema geminatum.
Meridion circulare.
Achanthes longipes.
Cocconeis Grevellii.
Melosira.
Orthosira Dickieia.
Amphitetras antediluviana.
Biddulphia pulchella.
Triceratium, various.
Arachnoidiscus Ehrenbergii.
“ Japonicus.
“ Indicus.
Aulacodiscus margaritifera.
“ Oreganus.
“ formosum.
Enpodiscus Ralfsii.
“ Argus.
“ fulvus.
“ Rogersii.
“ sculptus.
Coccinodiscus radiatus.
“ centralis.
“ concavus.

Diatomaceæ, Recent and Fossil.

Infusoria from Ichaboe Guano.
Isthmia enervis.
“ nervosa.
Synedra pulchella.
Nitzschia sarvula.
From Aberdeenshire.
“ Albany.
“ Africa.
“ Australia.
“ Auvergne.
“ Baden.
“ Bangor.
“ Barbadoes, Chalky Mount.
“ “ Mt. Hilloughby.
“ “ Scotland District.
“ “ Springfield.
“ Bermuda.
“ Bilin.
“ Blue-hill Pond, Maine.
“ Cartel de Piano, Italy.
“ Chalk, Gravesend.
“ “ Moudon.
“ “ Palermo.
“ Dolgelly, North Wales.
“ Egar, Bohemia.
“ Fraunzebad, Bohemia.
“ Georgia.
“ Gossa, Bohemia.
“ Hartford, Connecticut.
“ Island of Mull.
“ Kritchelberg, Bohemia
“ Lapland.
“ Leicestershire.
“ Lunenburg.
“ Lough Mcurne.
“ Magdeberg.
“ Manchester, U. S.
“ Mourne Mountain, Ireland.
“ New Zealand.
“ Obero, Germany.
“ Oran.
“ Oregon.
“ Peat.
“ Petersburg, Virginia.
“ Rappahannock Cliff, Va.
“ Richmond, Va.
“ Shockoe-hill.
“ Tarrytown, New York.
“ Tripoli, Italy.
“ Tuscany.
“ Newport, Rhode Island.
“ Atlantic, (various depths).
“ Australia.
“ Cherbourg.
“ Boston Harbor.

POLARIZING OBJECTS.

75 cts.

Chemicals.

Borate of Ammonia.
 Bitartrate "
 Borax.
 Boracic Acid.
 Citric "
 Gallic "
 Hippuric "
 Lithic "
 Arsenious "
 Tartaric "
 Cholesterine.
 Epsom Salt.
 Murexide.
 Salicine.
 Chlorate of Potash.
 Bichromate "
 Bitartrate "
 Red Prussiate "
 Sulphate of Nickel.
 Quinine.
 Iodide of Quinine.
 Oxalate of Lime.
 Sulphate "
 Carbonate "
 Bitartrate "
 Tartrate "
 Oxalate of Ammonia.
 Oxalurate "
 Tartrate "
 Asparagine.
 Naphthaline.
 Urea.
 Sulphate of Cadmium.
 " Copper.
 Sugar.
 Iodide of Potassium.
 Cinchonine.
 Stearine.
 Oxalic Acid.
 Acetate of Copper.
 Sulphur.

Minerals.

Zeolite.
 Satin Spar.
 Labrador Spar.
 Section of Agate.
 Selenite, red and green.
 " blue and yellow.
 " various colors.
 Tremolite.
 Section of Black Marble.
 " White "
 " Brighton Pebble.
 " Granite, various.

Animal Substances.

Palates, various.
 Claws "
 Finger Nail, human.
 Corns "
 Foot Pad of Cat.
 Hoof of Sheep.
 " Horse.
 " Cow and Ox.
 " Goat.
 Horns, various.
 Quill of Porcupine.
 Whisker of Walrus.
 Bone of Cuttle Fish.
 Whalebone
 Embryo Oysters.
 Tendon Achilles, Human.
 Sections Human Skin.
 " Hair, Human.
 " Beard, "
 Scales of Eel.
 " Perch.
 " Striped Bass.
 Fin of Fish.
 Bone of Fish.
 Leg and Elytion of Dytiscus.

MISCELLANEOUS OBJECTS, &c.

Polariscope Objects Moving in Fluid.

\$1 00.

Animal substances, mixed.

Vegetable " "

Brazilian Pebble Fragments.

Quartz Rock " "

Rolling stones, various.

Young Oysters.

Paper Fabric, Wasp's Nest.

Viscid lines of Spider's Web.

File and Drum of Cricket.

Selenites, various colors.

Micrometers, 100, 1000, 2000.

Animalcule Cages.

Zoophyte Troughs.

Glass stage with Ledge.

A SET OF TEN SLIDES ILLUSTRATING THE ANATOMY OF A BLOW-FLY.

Antennæ.

Leg and Foot.

Muscle.

Eye.

Spiracle.

Stomach.

Proboscis.

Trachea.

Wing.

Ovipositor.

In a Box, per. set.....\$7 50

Educational Series of Objects Systematically arranged for Instructive Illustrations.

Substances used in Felting and Textile Fabrics.

The Anatomy of an Insect complete. (Blow-Fly).

The Development, Growth, and Structure of Human Bone.

The Structure of Bone, in Man, Mammals, Birds, Reptiles, Fish, &c.

" Shell, Fish Scales, and the hard coverings of Animals.

" Hairs, Feathers, &c.

" Teeth in Man, Mammals, Reptiles and Fish.

Blood Discs from " " " "

A series of Urinary Deposits in various diseases.

Diseased Structures, Kidney, Lung, Bone, Muscle, Cancer Cells, &c.

The Organic Structure and Fructification of Plants exhibiting Cuticles, Hairs.

Scales, Glands, Ducts, Cells, Stomata, Spiral and Scalariform Vessels,

Fibro Cellular Tissue, Fronds, Spores, Seeds, Pollens.

Objects for the Lantern and Oxyhydrogen Microscope.

Almost any object having sufficient color and transparency, may be mounted for the Lantern, or the Oxyhydrogen Microscope. These are on Glass Circles.....Price from \$2 00 to \$5 00.

TAKE PARTICULAR NOTICE.

Any one desiring an object not especially named in this Catalogue, will please order it, and if possible it will be prepared or purchased for him. And any one possessing valuable Unmounted Specimens of any structure, may have them properly prepared and mounted, by forwarding to me.



Backs, 50 cts,
per hundred.



Adhesive Labels,
with number,
25 cts. per hundred.



Adhesive Gilt Labels.

50 cts. per hundred;

Adhesive name Label, Round,

10 cts. per hundred.

Adhesive name Label, Oval,

20 cts. per hundred.

Backs or Fronts, if with holes punched.....25 cts per hundred extra

AMERICAN MICROSCOPES AND OBJECTIVES.

First Class Achromatic Microscopes and all their appliances,....

made by.....J. ZENTMEYER;

First Class Objectives. Dry or Immersion, made by.....R. B. TOLLES;

“ “ “ “ “ “.....WM. WALES;

These are all too well known to require comment here. By special arrangement with these eminent makers, I am enabled to sell their productions at their regular prices, and generally at much shorter notice than if ordered direct from them. Price lists furnished on demand.

